

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A system for heating transmission fluid, comprising:
an oil pan secured to a transmission case for containing hydraulic fluid, including a surface at least partially enclosing the fluid within the oil pan;

a supply duct for carrying exhaust gas from an engine;

a heat exchanger secured to the oil pan, communicating through a first connection with the supply duct, and defining a flow path of exhaust gas along the surface through the heat exchanger for transferring heat from the exhaust gas to fluid contained in the oil pan, the heat exchanger further comprising surfaces enclosing the exhaust gas in the heat exchanger, the heat exchanger having an opening bounded by the enclosing surfaces, the opening being at least partially closed by the surface of the oil pan; an inlet port passing through a surface of the heat exchanger and communicating with the supply duct; an exhaust port passing through a surface of the heat exchanger and communicating with the supply duct; and a baffle located between the inlet port and exhaust port for directing flow of exhaust gas in the heat exchanger along the surface of the oil pan;

an exhaust duct communicating through a second connection with the supply duct, and connected to the heat exchanger for carrying engine exhaust gas from the heat exchanger to the supply duct; and

a valve located between the first connection and second connection for opening and closing the supply duct to the flow of exhaust gas between the first connection and second connection.

2. (Original) The system of claim 1, further comprising:
an engine exhaust manifold; and

a catalytic converter for connection to the engine exhaust manifold, and located in an exhaust gas flow path between the engine exhaust manifold and first connection.

3. (Original) The system of claim 1, wherein closing the valve directs exhaust gas through the first connection to the heat exchanger, and opening the valve causes exhaust gas to bypass the heat exchanger.

4. (Original) The system of claim 1, wherein the heat exchanger further comprises:

surfaces enclosing the exhaust gas in the heat exchanger, the heat exchanger having an opening bounded by the enclosing surfaces, the opening being closed by the surface of the oil pan.

5. (Cancelled)

6. (Currently Amended) A system for heating transmission fluid, comprising:
an oil pan for containing hydraulic fluid supplied to a transmission;
a supply duct for carrying exhaust gas from an engine;
a heat exchanger secured to the oil pan, communicating with the supply duct, and defining a flow path of exhaust gas along a surface of the oil pan, for transferring heat from the exhaust gas to the oil pan, the heat exchanger further comprising surfaces enclosing the exhaust gas in the heat exchanger, the heat exchanger having an opening bounded by the enclosing surfaces, the opening being at least partially closed by the surface of the oil pan; an inlet port passing through a surface of the heat exchanger and communicating with the supply duct; an exhaust port passing through a surface of the heat exchanger and communicating with the supply duct; and a baffle located between the inlet port and exhaust port for directing flow of exhaust gas in the heat exchanger along the surface of the oil pan;

an exhaust duct communicating with the supply duct, and connected to the heat exchanger for carrying engine exhaust gas from the heat exchanger to the supply duct; and

a valve directing exhaust gas to the heat exchanger from the exhaust duct, and for bypassing exhaust gas flow to the heat exchanger.

7. (Original) The system of claim 6, further comprising:

an engine exhaust manifold; and

a catalytic converter connected to the engine exhaust manifold and supply duct.

8. (Original) The system of claim 6, wherein the heat exchanger further comprises:

surfaces enclosing the exhaust gas in the heat exchanger, the heat exchanger having an opening bounded by the enclosing surfaces, the opening being closed at least partially by a surface of the oil pan.

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)